

February 13, 2003

TO: Community Advisory Group (CAG)

RE: Soil Testing and Evaluation of Herculaneum Lawns Involved in Remediation

FROM: Dean Wilson, Agriculture Specialist

At the November CAG meeting, several residents voiced concerns about the lawns involved in remediation. The Jefferson County Extension Center offered to evaluate these problem lawns with these objectives:

- 1) Evaluate the grass stands and suggest horticultural practices that would improve the lawns
- 2) Soil test to determine fertility and to obtain fertilizer recommendations that are tailored to the site.
- 3) Identify practices that would help made lawn remediation more successful in the future

Four lawns were tested and evaluated. The condition of the grass ranged from excellent, to a complete failure in one lawn. The topsoil brought in to replace the lead contaminated soil tested quite well for fertility. Soil pH was near 7.0, which is certainly in the adequate range to grow lawn grasses. Soil compaction was an issue in three out of the four lawns. Reports were forwarded to each homeowner, with a copy sent to USEPA, with suggestions for improving the lawn by overseeding, fertilization, and in the case of those with compaction, providing aeration

The following conclusions and suggestions were forwarded to Bruce Morrison of USEPA:

- 1) It is important to understand that it often takes a couple of seasons to establish lawns in Jefferson County. Heat, drought, too much rain, extremes in cold, and competition from weeds can make seedings unsuccessful. This is especially true with spring seedings. Fertilization, overseeding, and irrigation are all tools that can be used to help overcome environmental challenges. However, patience may be just as important.
- 2) While the soil brought in for Herculaneum lawns is more than adequate from a soil nutrient standpoint, it does contain almost 40% clay. While high clay soils can be productive, they tend to compact easily, get drier in summer, hold more moisture in wet periods, and are more difficult for roots to penetrate. Therefore, it is suggested that the source of the soil be changed and that the soil contain less than 27% clay.

The Extension Center will continue to help homeowner with lawn issues at the CAG's request. Soil tests are available to residents of Herculaneum, and for that matter, all residents of Jefferson County, for \$8.50 per test. Visits to problem lawns can be scheduled as time permits, by calling the Jefferson County Extension Center at 636-797-5391.

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